

REMARKS

I. Introduction

As an initial matter, Applicants added new claims 37-39 in the previously filed amendment dated October 28, 2005. While the Final Office Action makes reference to claims 37 and 38, it does not make reference to claim 39. Applicant respectfully requests that claim 39 be considered by the Examiner.

With the addition herein of new claims 40-49, claims 1-9, 11-16, 19-21 and 37-49 are pending in the present application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

II. Rejection of Claims 1-3 Under 35 U.S.C. § 103(a)

Claims 1-3 were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,547,721 ("Higuma et al."). Applicants respectfully submit that Higuma et al. do not render unpatentable the present claims for the following reasons.

Claim 1 relates to a flexible shaft. Claim 1 has been amended herein without prejudice to recite that the flexible shaft includes a moisture sensor disposed within the outer sheath configured to communicate data corresponding to the presence of moisture within the outer sheath. Support for this amendment can be found, for instance at page 39, lines 30-32, of the Specification which states that "[m]oisture sensor 990 is coupled to the data transfer cable 38 to communicate an indication of the presence of moisture."

Higuma et al. state that "a moisture absorptive member 158 may be placed in the sealed space." Col. 26, lines 1-2. Higuma et al. also state that "[t]he moisture absorptive member 158 absorbs invading steam and will thus help prevent deterioration of electronic parts." Col. 26, lines 2-4. Higuma et al. further state that "[i]f the moisture absorptive member can be replaced with a new one, it would be more advantageous." Col. 26, lines 4-6.

It is respectfully submitted that Higuma et al. do not anticipate claim 1 for at least the reason that Higuma et al. do not describe all of the features recited in

claim 1. For example, Higuma et al. do not describe a moisture sensor disposed within the outer sheath configured to communicate data corresponding to the presence of moisture as recited in claim 1. The Specification states at page 39, lines 30-32, that “[m]oisture sensor 990 is coupled to the data transfer cable 38 to communicate an indication of the presence of moisture (e.g., sensed moisture data is communicated) to the remote power console 12.” The Specification also states at page 40, lines 1-4, that “[i]n accordance with and/or based on the sensed moisture data, the remote power console 12 may communicate the presence of moisture to a user, such as, for example, by audible or visual signal” The Specification also states at page 39, line 32 – page 40, line 1, that “[t]he presence of moisture within the flexible shaft 20 may cause corrosion of the components of the flexible shaft 20, such as, for example, the rotatable drive shafts 30, 32, electronic or electrical components arranged in the flexible shaft 20, etc.”

Higuma et al., on the other hand, describe at page 26, lines 2-4, that “[t]he moisture absorptive member 158 absorbs invading steam and will thus help prevent deterioration of electronic parts.” Col. 26, lines 2-4, emphasis added. The Final Office Action maintains that “[a]s Higuma et al. disclose that moisture absorptive member may be removed (see col. 26, lines 1-2), it follows that its appearance would communicate the presence of moisture (indicating the need for removal and replacement).” Emphasis added. The Final Office Action further states that “the communication of the presence of moisture can be accomplished by the moisture absorptive member 158 of Higuma et. al., as when it would be removed and replaced as contemplated by Higuma et al. (see col. 26, lines 1-2).” Applicant respectfully maintain that there is nothing in Higuma et al. that discloses or suggests that the moisture absorptive member 158 is configured to communicate data corresponding to the presence of moisture, since the presence of moisture in Higuma et al. is at most indicated by an inspection by a user of the moisture absorptive member 158 when removed.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed

combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). As more fully set forth above, it is respectfully submitted that Higuma et al. does not render unpatentable claim 1, because Higuma et al. fail to disclose or suggest a moisture sensor disposed within the outer sheath that is configured to communicate data corresponding to the presence of moisture as recited in claim 1.

As for claims 2-3, each of which ultimately depend from and include all of the limitations of independent claim 1, it is respectfully submitted that Higuma et al. do not render unpatentable these dependent claims for at least the same reasons given above in support of the patentability of claim 1. In re Fine, supra (any dependent claim that depends from a non-obvious independent claim is non-obvious).

III. Rejection of Claims 7-9, 11-16 and 19 Under 35 U.S.C. § 103(a)

Claims 7-9, 11-16 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Higuma et al. in view of U.S. Patent No. 6,071,233 (“Ishikawa et al.”). It is respectfully submitted that the combination of Higuma et al. and Ishikawa et al. does not render obvious the present claims herein for the following reasons.

Claim 11 relates to a surgical system. Claim 11 has been amended herein without prejudice to recite a moisture sensor disposed within the outer sheath configured to communicate the presence of moisture. Support for this amendment is set forth above in connection with the amendments made to claim 1.

The Final Office Action admits that “Higuma et al. are silent as to a coupling including a locking mechanism that attached to armor tube 35.” However, the Final Office Action states that “Ishikawa et al. disclose a channel tube 2 that is coupled to an endoscope to allow the passage of instruments via a fixing tape 42 (see Figures 3A and 3B).” The Final Office Action maintains that “Higuma et al. thus demonstrate that channel tube 2 that detachably couple to the exterior of an endoscope via a flexible strip locking mechanism are well known in the art.” The

Final Office Action further maintains that "it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the endoscope 1 of Higuma et al. with the channel tube 2 and flexible tape 42 of Ishikawa et al. as a means to attach an additional tool tube to the exterior to the endoscope."

It is respectfully submitted that the combination of Higuma et al. and Ishikawa et al. does not render unpatentable claim 7-9 for at least the reason that the combination of Higuma et al. and Ishikawa et al. does not describe all of the features recited in claims 7-9. As set forth above, Higuma et al. fail to disclose or suggest a moisture sensor disposed within the outer sheath that is configured to communicate data corresponding to the presence of moisture as recited in claim 1. This feature of claim 1 is also not described in Ishikawa et al. Since claims 7-9 depend from claim 1, and therefore include all of the limitations of claim 1, the combination of Higuma et al. and Ishikawa et al. do not describe all of the features of claims 7-9. For at least this reason, it is respectfully maintained that claims 7-9 are not rendered unpatentable by the combination of Higuma et al. and Ishikawa et al.

Also, it is respectfully submitted that the combination of Higuma et al. and Ishikawa et al. does not render unpatentable claim 11 for at least the reason that the combination of Higuma et al. and Ishikawa et al. does not describe all of the features recited in claim 11. For the same reasons as set forth above, it is respectfully maintained that neither Higuma et al. and Ishikawa et al. describe a moisture sensor disposed within the outer sheath configured to communicate data corresponding to the presence of moisture.

As for claims 12-16 and 19, which depend from claim 11 and therefore include all of the features of claim 11, it is respectfully submitted that the combination of Higuma et al. and Ishikawa et al. does not render unpatentable these dependent claims for at least the same reasons given above in support of the patentability of claim 11. In re Fine, supra (any dependent claim that depends from a non-obvious independent claim is non-obvious).

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

IV. Rejection of Claims 4-6 and 20-21 Under 35 U.S.C. § 103(a)

Claims 4-6 and 20-21 were rejected under 35 U.S.C. § 103(a) as unpatentable over Higuma et al. in view of Ishikawa et al. and further in view of U.S.

Patent No. 6,547,721 ("Abe"). As an initial matter, Abe does not constitute prior art to the present application under 35 U.S.C. §103(a), because the present application claims priority to, and the above-referenced claims of the present application are fully supported by, for example, Applicant's U.S. Patent Appl. No. 09/887,789, which was filed on June 22, 2001, which is before the U.S. filing date of February 12, 2002, and the publication date of August 29, 2002, of Abe. Notwithstanding the foregoing, Applicants respectfully submit that the combination of Higuma et al., Ishikawa et al. and Abe does not render unpatentable the present claims for at least the following reasons.

The Final Office Action admits that "Higuma et al. and Ishikawa et al. are silent as to a memory unit disposed on the endoscope 1." However, the Final Office Action states that "Abe discloses an endoscope having a memory 33 for sorting data (see col. 3, lines 25-32)." The Final Office Action maintains that "Abe thus demonstrates that endoscopes having the ability to store data are well known in the art [and that] accordingly, it would have been obvious for one of the ordinary skill in the art at the time the invention was made to provide the endoscope of Higuma et al. with the memory 33 disclosed by Abe."

It is respectfully submitted that the combination of Higuma et al., Ishikawa et al. and Abe does not render unpatentable claims 4-6 and 20-21 for at least the reason that the combination of Higuma et al., Ishikawa et al. and Abe does not describe all of the features recited in their respective independent claims 1 and 11. As set forth above, neither Higuma et al. nor Ishikawa et al. describe a moisture sensor disposed within the outer sheath configured to communicate data corresponding to the presence of moisture as recited in claims 1 and 11. Abe is not relied on to disclose or suggest, and in fact does not disclose or suggest, that feature of claim 1 that is not described by Higuma et al. and Ishikawa et al. Rather, Abe purports to relate to an electronic endoscope system that enables different types of endoscopes to be used and makes no mention whatsoever of a moisture sensor disposed within the outer sheath configured to communicate data corresponding to the presence of moisture. Since claims 4-6 and 20-21 depend from respective ones of independent claims 1 and 11, and therefore includes all of the limitations of respective ones of independent claims 1 and 11, the combination of Higuma et al., Ishikawa et al. and Abe does not describe all of the features of claims 4-6 and 20-21. For at least this reason, it is respectfully maintained that claims 4-6 and 20-21 are

not rendered unpatentable by the combination of Higuma et al., Ishikawa et al. and Abe.

In view of the foregoing, withdrawal of this rejection is respectfully requested.

V. Allowable Subject Matter

Applicant gratefully acknowledges the indication that claims 37 and 38 are allowable.

VI. New Claims

Applicant has added herein without prejudice new claims 40-49. Applicant respectfully submits that the pending claims are in condition for allowance and requests that such action be taken. For example, new independent claim 40 relates to a shaft and includes the limitation of "a moisture sensor ... configured to communicate data corresponding to the presence of moisture within the outer sheath," which, for the reasons set forth above, is respectfully maintained not to be disclosed or suggested by any prior art references cited in the Office Action.

VII. Conclusion

Applicant respectfully submits that the pending claims are in condition for allowance and requests that such action be taken. If for any reason the Examiner believes that prosecution of this application would be advanced by contact with the Applicant's attorney, the Examiner is invited to contact the undersigned at the telephone number given below.

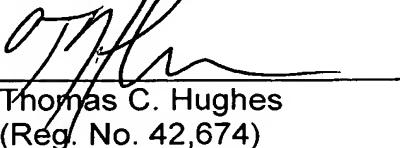
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The Commissioner is authorized to charge any necessary fees or credit any overpayments under 37 C.F.R. §§ 1.16 and 1.17 to Deposit Account No. 11-0600.

Respectfully submitted,

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